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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,763	12/30/2003	Michael D. O'Shea	KCX-731 (19567)	2711
22827	7590	05/16/2008	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			MYHRE, JAMES W	
			ART UNIT	PAPER NUMBER
			3688	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,763	<b>Applicant(s)</b> O'SHEA ET AL.	
	<b>Examiner</b> JAMES W. MYHRE	<b>Art Unit</b> 3688	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 21-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Amendment filed on March 21, 2008 cancelled Claims 20 and 28-39 and amended Claims 1, 3, 10-12, 14, 17-19, 21, 24, and 27. Thus, the currently pending claims considered below are Claims 1-19 and 21-27.

### ***Claim Rejections - 35 USC § 112***

2. The Amendment filed on March 31, 2008 cancelled Claims 20 and 34 and amended Claims 3, 12, and 19 to overcome the rejection of these claim under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention as cited in paragraph 3 of the December 31, 2007 Office Action. Thus, the Examiner hereby withdraws those rejections.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-9 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloane (5,918,211).

Claims 1, 11, and 13: Sloane discloses a system, method, and apparatus for providing cross-marketing offers to a customer, comprising:

- a. a product inventory location (i.e. a store) displaying products with electronic-readable tags (e.g. bar codes) (column 3, lines 12-31 and column 7, line 41 – column 8, line 63);
- b. a smart cart defining a product storage area used by a customer to store products while shopping (Figure 12, item 102);
- c. A tag reading device (e.g. a scanner) for reading the tag to retrieve information from the electronic-readable tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);
- d. determining a cross-marketing promotional offer associated with the product associated with the read tag (column 3, lines 12-31 and column 7, line 41 – column 8, line 63);
- e. notifying the customer in or near real-time of the offer (column 3, lines 12-31 and column 7, line 41 – column 8, line 63); and
- f. measuring a cross-referencing a physical parameters of the product to verify the actual product corresponds to the product information (Figure 12, item 44a; column 4, lines 11-13; and column 9, lines 27-42).

While Sloane does not explicitly disclose that the product tag is an electronic tag, such as a tag that uses radio-frequencies or infra-red light to transmit data, these were well known within the industry prior to the instant invention and would have been

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obvious choices as substitutes for Sloane's bar code tags to one having ordinary skill in the art at the time the invention was made. One would have been motivated to use such electronic tags in order to preclude the customer from having to pick up the item or to move the reader next to the shelf (i.e. to "keep both hands free") as discussed in Sloane (column 7, lines 45-48).

Sloane discloses that the video camera images are used for "surveillance of the scanned products and the products being placed into the cart", i.e. the product information retrieved for the scanned product is compared (cross-referenced) to the product information of the imaged products being placed into the cart.

Claim 2: Sloane discloses a system as in Claim 1 above, and further discloses the offer is triggered by at least two items in the customer-storage-area (shopping cart)(column 8, lines 21-29).

Claims 3, 4, and 12: Sloane discloses a system, method, and apparatus as in Claims 1 and 11 above, and further discloses incorporating various wireless connections, such as radio frequencies (RF), infrared, cellular, shortwave, and any other known method of transmitting and receiving information without use of direct wire connections" (column 7, lines 52-56). While Sloane does not explicitly disclose that the product tag would also incorporate the RF wireless technology, as discussed above, it would have been obvious to do so to one having ordinary skill in the art at the time the invention was made.

Claim 5: Sloane discloses a system as in Claim 1 above, and further discloses using the store's central computer for performing the offer determining steps (column 7, line 41 – column 8, line 63).

Claim 7: Sloane discloses a system as in Claim 1 above, but does not explicitly disclose that there is a computer on the shopping cart that performs the above steps. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a processor (computer) on the shopping cart and to use that processor to perform at least some of the computations disclosed in Sloane. One would have been motivated to use such an on-board processor (computer) in view of Sloane's disclosure of retrieving and displaying to the customer past offer selections, shopping histories, awarded credits etc. The use of such an on-board processor would free up the store's central computer for other processing, such as check-out processing, possibly resulting in faster, shorter check-out lines (which is one of Sloane's motivations for having the scanners).

Claims 6, 8, and 9: Sloane discloses a system, method, and apparatus as in Claims 1 and 7 above, and further discloses a customer-interface on the shopping cart that displays the scanned or requested product information and/or offer to the customer (column 7, line 41 – column 8, line 63).

5. Claims 10, 14-19, and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sloane (5,918,211) in view of Humble (GB 2,193,000).

Claims 10, 14, and 17: Sloane discloses a system, method, and apparatus as in Claims 9, 11, and 16 above, but does not explicitly disclose using a scale to measure a physical parameter (e.g. weight) of the product being scanned nor determining if the weight is within a tolerance for the product. However, Humble discloses a similar system, method, and apparatus for shopping in which one or more scales are used to measure the weight of the product in order to compare it with a predetermined weight of the product in order to ensure that the product matches the scanned bar code. Humble discloses that the scale may measure the weight of each individual product or the weight of the shopping cart (i.e. total weight of all products) and determine the difference between the cart prior to the removal of the product at the check-out and after removal, thus determining the weight of the removed product. (column 1, line 27-127). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to incorporate a measuring device, such as a scale, into the cart in order to verify that the scanned product is actually the one placed into the cart (or removed from the cart and placed into the bag at check-out). One would have been motivated to use a scale in the cart in this manner in view of Humble's disclosure that systems using product weight to identify the product had been around for years prior to the invention. The Examiner notes that incorporating such a scale on the cart would also allow the customer to weigh loose produce, such as fresh fruits and

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vegetables, without searching for a hanging scale as is commonly located within a grocery supermarket.

Claims 18 and 23-26: Sloane discloses a system, method, and apparatus for providing cross-marketing offers to a customer, comprising:

- a. a product inventory location (i.e. a store) displaying products with electronic-readable tags (e.g. bar codes) (column 3, lines 12-31 and column 7, line 41 – column 8, line 63);

- b. A tag reading device (e.g. a scanner) for reading the tag to retrieve information from the electronic-readable tag (column 3, lines 12-31 and column 7, line 41 - column 8, line 63);

- c. determining a cross-marketing promotional offer associated with the product associated with the read tag (column 3, lines 12-31 and column 7, line 41 – column 8, line 63); and

- d. notifying the customer in or near real-time of the offer (column 3, lines 12-31 and column 7, line 41 – column 8, line 63).

- e. establishing a communication to a third party computer so that the customer can directly communicate with a third party via the customer interface (column 2, lines 1-21 and 35-43). Sloane allows the consumer to retrieve and store various coupons, sales information, etc. through the Internet and to retrieve this information/coupons while shopping with the smart cart, implicitly establishing the appropriate connections. Furthermore, since Sloane explicitly discloses that the



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consumer interface is in radio frequency communication with the store computer and/or the point-of-sale terminals, it is inherent that connections to other (third-party) computers could be made through the same radio frequency communications, as long as the third party computers have a radio frequency receiving means. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to establish communications with one or more third party computers in order to retrieve the customer's frequent shopper account information, saved coupon information downloaded from the Internet, or any other third party computer so desired. One would have been motivated to make such a connection in order to allow the customer in Sloane to utilize the pre-selected Internet coupons (or to do the selection while shopping).

While Sloane does not explicitly disclose that the product tag is an electronic tag, such as a tag that uses radio-frequencies or infra-red light to transmit data, these were well known within the industry prior to the instant invention and would have been obvious choices as substitutes for Sloane's bar code tags to one having ordinary skill in the art at the time the invention was made. One would have been motivated to use such electronic tags in order to preclude the customer from having to pick up the item or to move the reader next to the shelf (i.e. to "keep both hands free") as discussed in Sloane (column 7, lines 45-48).

Sloane does not explicitly disclose using a scale in the cart to measure a physical parameter (e.g. weight) of the product being scanned nor determining if the weight is within a tolerance for the product. However, Humble discloses a similar system,

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method, and apparatus for shopping in which one or more scales are used to measure the weight of the product in order to compare it with a predetermined weight of the product in order to ensure that the product matches the scanned bar code. Humble discloses that the scale may measure the weight of each individual product or the weight of the shopping cart (i.e. total weight of all products) and determine the difference between the cart prior to the removal of the product at the check-out and after removal, thus determining the weight of the removed product. (column 1, line 27-127). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made for Sloane to incorporate a measuring device, such as a scale, into the cart in order to verify that the scanned product is actually the one placed into the cart (or removed from the cart and placed into the bag at check-out). One would have been motivated to use a scale in the cart in this manner in view of Humble's disclosure that systems using product weight to identify the product had been around for years prior to the invention. The Examiner notes that incorporating such a scale on the cart would also allow the customer to weigh loose produce, such as fresh fruits and vegetables, without searching for a hanging scale as is commonly located within a grocery supermarket.

Claim 19: Sloane and Humble disclose an apparatus as in Claim 18 above, and Sloane further discloses a customer-interface on the shopping cart that displays the scanned or requested product information and/or offer to the customer (column 7, line 41 – column 8, line 63).

Claims 15 and 21: Sloane and Humble disclose an apparatus as in Claim 14 and 19 above, and Sloane further discloses transferring the product information from the cart to the check-out computer (column 3, lines 48-59).

Claims 16 and 27: Sloane and Humble disclose a method and apparatus as in Claims 15 and 26 above, and Sloane further discloses determining the total and net sales price for the products checked through the check-out to include adding sales taxes and subtracting discounts (column 3, lines 48-59).

Claim 22: Sloane and Humble disclose an apparatus as in Claim 19 above, but neither explicitly disclose that the tag reader and the scale are integrated into the same component. However, such integration would have been obvious to one having ordinary skill in the art at the time the invention was made in order to more easily pass the data between the two devices as disclosed by Humble. Furthermore, such an integration would eliminate the need to have connecting wires running through the shopping cart that may be damaged by the customer and the normal usage of the cart.

### ***Response to Arguments***

6. Applicant's arguments filed March 31, 2008 have been fully considered but they are not persuasive.

a. The Applicant argues in reference to Claim 1 (etc.) that neither Sloane nor Humble disclose “an item evaluator configured to measure a physical parameter of the products placed in the customer storage area” which is “cross-referenced with the product information to verify that the actual product corresponds to the product referenced in the product information” (pages 10-12). However, the Examiner notes, as discussed above, Sloane explicitly discloses a video camera as a security device that take a video image (i.e. a physical parameter) of the product being placed into the cart and compares it with stored image information about the scanned product to prevent fraud.

b. The Applicant argues in reference to Claim 18 that neither Sloane nor Humble disclose “establishing a communication connection with a third party computer so that a customer can directly communicate with a third party via the customer interface” (pages 12-13). The Examiner notes this has been addressed in the rejection above, wherein Sloane allows the customer to connect through the Internet to retrieve and save coupons and product information. This product information/coupons can then be retrieved while the customer is shopping. It is implied that the appropriate connection are made. Furthermore, since Sloane explicitly discloses that the consumer interface is in radio frequency communication with the store computer and/or the point-of-sale terminals, it is inherent that connections to other (third-party) computers could be made through the same radio frequency communications, as long as the third party computers have a radio frequency receiving means.

c. The Applicant also argues in reference to Claim 18 (etc.) that Sloane does not disclose a scale in the customer storage area of the shopping cart, and that Humble only discloses a scale at the point-of-sale terminal, not in the shopping cart (page 13). The Examiner notes that Humble discloses the use of weight to verify a product's identity had been used for years. Humble also discloses comparing the weight of each individual product being placed into bagging shopping cart at the point-of-sale terminal to ensure the correct product was being bagged. This, combined with Sloane's disclosure of measuring using the product parameters (image) to verify the correct product was being placed into the shopping cart while shopping would have rendered it obvious to one having ordinary skill in the art to also use the scale to verify the item being placed in the shopping cart while the customer was shopping.

### ***Conclusion***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES W. MYHRE whose telephone number is (571)272-6722. The examiner can normally be reached on Monday through Thursday 6:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Stamber can be reached on (571) 272-6724. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JWM  
May 12, 2008

/James W Myhre/  
Primary Examiner, Art Unit 3688